

Write an ansible playbook to install python on a Linux Machine.

Requirements:

- 1. The Python version should be variablized.*
- 2. Make sure to check the specified version is already installed. If installed print the appropriate message that the given version is already installed.*

So the project is created in the aws itself(more precisely in ec2 only)

Step -1 make the three aws ec2 instances and attach them with the help of ssh keys.

One will be master node and the other two will be agent

Now after establishing the connection

Step 2 make a yml file say playbook.yml in master node and make the file as

```
[root@ip-172-31-11-58 ec2-user]# cat install_python.yml
---
- name: Install Python on Linux Machine
  hosts: all
  become: true

  vars:
    python_version: 3

  tasks:
    - name: Check if Python {{ python_version }} is already installed
      command: python{{ python_version }} --version
      register: python_check
      ignore_errors: true

    - name: Install Python {{ python_version }}
      yum:
        name: python{{ python_version }}
        state: present
      when: python_check.rc != 0

    - name: Print message if Python {{ python_version }} is already installed
      debug:
        msg: "Python {{ python_version }} is already installed."
      when: python_check.rc == 0
```

After it run the file with ansible-playbook playbook.yml

And as a result we got

```
[root@ip-172-31-11-58 ec2-user]# nano install_python.yml
[root@ip-172-31-11-58 ec2-user]# ansible-playbook install_python.yml --extra-vars "python_version=3"

PLAY [Install Python on Linux Machine] *****

TASK [Gathering Facts] *****
[WARNING]: Platform linux on host 172.31.2.169 is using the discovered Python interpreter at /usr/bin/python, but future installation of another Python interpreter could change this. See https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.2.169]
[WARNING]: Platform linux on host 172.31.6.71 is using the discovered Python interpreter at /usr/bin/python, but future installation of another Python interpreter could change this. See https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.6.71]

TASK [Check if Python 3 is already installed] *****
changed: [172.31.2.169]
changed: [172.31.6.71]

TASK [Install Python 3] *****
skipping: [172.31.2.169]
skipping: [172.31.6.71]

TASK [Print message if Python 3 is already installed] *****
ok: [172.31.2.169] => {
  "msg": "Python 3 is already installed."
}
ok: [172.31.6.71] => {
  "msg": "Python 3 is already installed."
}

PLAY RECAP *****
172.31.2.169      : ok=3    changed=1    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0
172.31.6.71      : ok=3    changed=1    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0
```